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SECRETARY FOR
ENVIRONMENTAL PROTECTION

State Water Resources Control Board

Division of Drinking Water

November 9, 2017

Anna Maria Martinez
Berryessa Estates (LBRID)
1195 Third Street, Room 201
Napa, CA 94559

CITATION NO. 02_03_17C_048 FOR PUBLIC WATER SYSTEM #2800526 BACTERIOLOGICAL MAXIMUM CONTAMINANT LEVEL VIOLATION

Enclosed is a citation issued to Berryessa Estates (LBRID) water system (System) by the State Water Resources Control Board, Division of Drinking Water (Division) for the failure to comply with the total coliform maximum contaminant level in August 2017.

Because this is an enforcement action for noncompliance with State regulations, your System will be billed at the Division's hourly rate (currently estimated at \$160.00) for the time spent issuing this citation. You will receive a bill for these fees sent from our Fee Billing Unit in Sacramento.

Any person who is aggrieved by a citation issued by the Division may file a petition with the State Water Resources Control Board (State Water Board) for reconsideration of the compliance order. Petitions must be received by the State Water Board within 30 calendar days of the issuance of the citation. The date of issuance is the date when the Division mails or serves a copy of the citation, whichever occurs first. If the 30th day falls on a Saturday, Sunday, or state holiday, the petition is due the following business day. Petitions must be received by 5:00 p.m. Information regarding filing petitions may be found at:

http://www.waterboards.ca.gov/drinking_water/programs/petitions/index.shtml

If you have any questions regarding this matter, please contact Lori Hanson at (707) 576-2604.

Sincerely,

Sheri K. Miller, P.E.
Mendocino District Engineer
Division of Drinking Water

Enclosures

c: Napa County Environmental Health
Steve Phillips, 2201 Jefferson Street, Napa, CA 94558

2800526/ComplianceFile#4
02_03_17C_048_2800526_MB/LSH

FELICIA MARCUS, CHAIR | THOMAS HOWARD, EXECUTIVE DIRECTOR

STATE OF CALIFORNIA
WATER RESOURCES CONTROL BOARD
DIVISION OF DRINKING WATER

Name of Public Water System: Berryessa Estates (LBRID)

Water System No: 2800526

To: Berryessa Estates (LBRID)
1195 Third Street, Room 201
Napa, CA 94559

Issued: November 9, 2017

CITATION FOR NONCOMPLIANCE
WITH TOTAL COLIFORM MAXIMUM CONTAMINANT LEVEL REGULATIONS
August 2017

The State of California Water Resources Control Board, Division of Drinking Water (herein known as "Division") hereby issues a citation to Berryessa Estates (LBRID) water system (herein known as "System") for failure to comply with Section 64426.1, Title 22, of the California Code of Regulations (CCR).

Chapter 4, Article 9, Section 116550 of Part 12 of Division 104 of the California Health and Safety Code (CHSC), authorizes the issuance of a citation for failure to comply with a requirement of Chapter 4 (California Safe Drinking Water Act), or any



1 regulation, standard, permit or order issued thereunder. A copy of the *Applicable*
2 *Statutes and Regulations* is located in Appendix 3, which is attached hereto and
3 incorporated by reference.

4 5 **STATEMENT OF FACTS**

6 Berryessa Estates (LBRID) is classified as a community public water system serving
7 189 residential connections and a population of approximately 454. The System
8 collected a routine bacteriological sample on August 7, 2017. The sample tested
9 positive for total coliform bacteria and negative for *E. coli*. Four repeat samples
10 were collected on August 9, 2017. All four samples tested positive for total coliform
11 bacteria and negative for *E. coli*. A raw source sample was collected on August 7,
12 2017. The source sample was positive for both total coliform and *E. coli*.

13 14 **DETERMINATIONS**

15 The Division has determined that the Berryessa Estates (LBRID) water system
16 violated Section 64426.1, Title 22, of the CCR in August 2017. Section 64426.1
17 states that a water supplier which collects fewer than 40 bacteriological samples a
18 month is in violation of the total coliform maximum contaminant level (MCL) when
19 more than one (1) distribution system sample collected during any month is total
20 coliform positive. Berryessa Estates (LBRID) water system collected five (5)
21 bacteriological samples in August 2017 from the distribution system. All five
22 samples tested positive for total coliform bacteria. Therefore, the System violated
23 the total coliform MCL regulations contained in Section 64426.1, Title 22, of the
24 CCR.

25
26 Under the Federal Revised Total Coliform Rule (rTCR), a water system which
27 exceeds the current Total Coliform MCL must also conduct a Level 1 Assessment.

1 The completed assessment must be submitted to the local regulating agency
2 (Division of Drinking Water District Office) within 30 days of the exceedance. Failure
3 to complete the corrective actions will be a violation of the Coliform Treatment
4 Technique in the Federal rTCR.

5 6 **DIRECTIVES**

7 The Berryessa Estates (LBRID) water system is hereby directed to take the
8 following actions:

- 9
- 10 1. Comply with Section 64426.1, Title 22, of the California Code of Regulations in
11 all future monitoring periods.
12
 - 13 2. On or before **November 27, 2017**, notify all persons served by the System of the
14 bacteriological maximum contaminant violation, in conformance with Section
15 64463.4 and Section 64465, Title 22 of the CCR. A copy of these regulatory
16 sections is provided in Appendix 3. The Public Notification Template in
17 Appendix 1 shall be used to fulfill this directive. **The corrective actions section**
18 **and contacts section of the template must be completed prior to**
19 **notification.** The System shall mail or hand deliver the notice to all persons
20 served by the water system. In addition, a second method of notification must
21 be chosen (see Appendix 2 - Compliance Certification). This second method of
22 public notification must also be completed no later than **November 27, 2017**.
23
 - 24 3. The System shall submit to the Division a completed **Level 1 Assessment** as
25 soon as possible and no later than **December 1, 2017**. Appendix 4 – **REVISED**
26 **TOTAL COLIFORM RULE (RTCR) – Level 1 Assessment** – shall be used to
27 fulfill this directive. The Level 1 Assessment requires the System to identify a

possible cause of the total coliform positive samples and to identify and describe corrective actions taken/needed.

4. The System shall complete and submit the **Compliance Certification** form, Appendix 2, to the Division no later than **December 1, 2017**. Proof of the two methods of public notification must be attached to the form.

The Division reserves the right to make such modifications to this Citation, as it deems necessary to protect public health and safety. Such modifications may be issued as amendments to this Citation and shall be effective upon issuance.

Nothing in this Citation relieves the System of its obligation to meet the requirements of the California Safe Drinking Water Act (CHSC, Division 104, Part 12, Chapter 4, commencing with Section 116270), or any regulation, standard, permit or order issued thereunder.

All documents required by this Citation shall be submitted to the Division at the following address:

State Water Resources Control Board
Division of Drinking Water - Mendocino District
50 D Street, Suite 200
Santa Rosa, CA 95404
Dwpdist03@waterboards.ca.gov

PARTIES BOUND

This Citation shall apply to and be binding upon the System, its officers, directors, agents, employees, contractors, successors and assignees.


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SEVERABILITY

The directives of this Citation are severable, and the System shall comply with each and every provision thereof, notwithstanding the effectiveness of any provision.

FURTHER ENFORCEMENT ACTION

Division 104, Part 12, Chapter 4, (commencing with Section 116270) of the California Health and Safety Code authorizes the Division of Drinking Water to: issue additional citations with assessment of penalties if the System continues to fail to correct a violation identified in a citation; take action to suspend or revoke a permit that has been issued to a public water system if the System has violated applicable law or regulations or has failed to comply with orders of the Division; and petition the superior court to take various enforcement measures against a public water system that has failed to comply with orders of the Division. The Division does not waive any further enforcement action by issuance of this citation.



Sheri Miller, P.E.
Mendocino District Engineer
Division of Drinking Water

11-9-2017
Date

Certified Mail No.: 7016 1370 0000 2062 1509

- Appendices (4):
- 1. Public Notification Template
 - 2. Compliance Certification
 - 3. Applicable Statutes and Regulations
 - 4. Level 1 Assessment



IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Este informe contiene informacion muy importante sobre su agua potable. Traduzcalo o hable con alguien que lo entienda bien.

Berryessa Estates (LBRID) Had Levels of Bacteria in its Drinking Water Above the Allowed Standard During August 2017

Our water system recently violated a drinking water standard. Although this is not an emergency, as our customers, you have a right to know what happened, what you should do, and what we did to correct the situation. Please share this information with other people who drink this water, especially those who may not have received this notice directly. You can do this by posting this notice in a public place or giving out copies by hand or mail.

What happened?

We routinely monitor our drinking water for contaminants. We took five water samples to test our drinking water for the presence of coliform bacteria during August 2017. All five of our samples showed the presence of this bacteria. The standard is that no more than one sample per month may test positive for bacteria. The positive samples were tested further for fecal coliform. None of the drinking water samples were found to contain fecal coliform. Our water system exceeded the maximum contaminant level allowed for total coliform bacteria, as specified in Section 64426.1, Title 22 of the California Code of Regulations (CCR).

What does this mean?

The State Water Resources Control Board, Division of Drinking Water (Division) sets drinking water standards and has determined that the presence of total coliform bacteria is a possible health concern. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present. Coliforms were found in more drinking water samples than is allowed. This was a warning of potential problems and it was a violation of the regulations.

What should I do?

You do not need to boil your water or take other corrective actions. This is not an emergency. If it had been, you would have been notified immediately.

People with severely compromised immune systems, infants, and some elderly may be at increased risk. These people should seek advice about drinking water from their health care providers. General guidelines on ways to lessen the risk of infection by microbes are available from EPA's Safe Drinking Water Hotline at (800) 426-4791.

If you have other health concerns related to the consumption of this water, you may wish to consult your doctor.

Has the problem been resolved? What corrective actions have been taken to prevent this violation from occurring in the future?

This notification of the public is being done in compliance with Section 64463.4 and Section 64465, Title 22, of the CCR as a means of keeping the public informed.

Persons wishing more information should contact:

(name)

(address)

(phone number)

PUBLIC WATER SYSTEM NO. 2800526

Date: _____

APPENDIX 2 - COMPLIANCE CERTIFICATION

Citation Number : 02_03_17C_048

Name of Water System: **Berryessa Estates (LBRID)**

System Number: **2800526**

As required by Section 116450 of the California Health and Safety Code, I certify that the users of the water supplied by this water system were notified of the violations of Title 22, California Code of Regulations. In addition, I certify that the Berryessa Estates (LBRID) water system complied with the directives of this citation as indicated below:

Required Action	Date Completed
Complete Appendix 1, as required in Directive 2 of this citation	<div></div>
Public Notification – Indicate methods below.	<div></div>
<input checked="" type="checkbox"/> Mail or hand deliver the notice to all persons served by the water system (REQUIRED);	
<u>AND choose one of the following methods:</u>	
<input type="checkbox"/> Publication in a local newspaper or newsletter (attach copy of newspaper publication or newsletter); OR	
<input type="checkbox"/> Post notice in conspicuous locations for 7 days (attach photos of posted copies at various locations, state locations and dates of posting); OR	
<input type="checkbox"/> Post notice on the Internet or intranet (provide website page and printout of notice)	

Signature of Water System Representative

Date

**THIS FORM MUST BE COMPLETED AND RETURNED TO THE DIVISION BY December 1, 2017.
ALL COPIES OF PUBLIC NOTICES MUST BE ATTACHED.**

Disclosure: Be advised that Section 116725 and 116730 of the California Health and Safety Code states that any person who knowingly makes any false statement on any report or document submitted for the purpose of compliance with the attached order may be liable for a civil penalty not to exceed five thousand dollars (\$5,000) for each separate violation for each day that violation continues. In addition, the violators may be prosecuted in criminal court and upon conviction, be punished by a fine of not more than \$25,000 for each day of violation, or be imprisoned in county jail not to exceed one year, or by both the fine and imprisonment.

APPENDIX 3 - APPLICABLE STATUTES AND REGULATIONS

FOR CITATION NO. 02_03_17C_048

Section 116650 of the CHSC states in relevant part:

- (a) If the State Board determines that a public water system is in violation of this chapter or any regulation, permit, standard, citation, or order issued or adopted thereunder, the department may issue a citation to the public water system. The citation shall be served upon the public water system personally or by certified mail. Service shall be deemed effective as of the date of personal service or the date of receipt of the certified mail. If a person to whom a citation is directed refuses to accept delivery of the certified mail, the date of service shall be deemed to be the date of mailing.
- (b) Each citation shall be in writing and shall describe the nature of the violation or violations, including a reference to the statutory provision, standard, order, citation, permit, or regulation alleged to have been violated.
- (c) A citation may specify a date for elimination or correction of the condition constituting the violation.
- (d) A citation may include the assessment of a penalty as specified in subdivision (e).
- (e) The State Board may assess a penalty in an amount not to exceed one thousand dollars (\$1,000) per day for each day that a violation occurred, and for each day that a violation continues to occur. A separate penalty may be assessed for each violation.

California Code of Regulations (CCR), Section 64421 states, in relevant part:

(a) Each water supplier shall:

- (1) Develop a routine sample siting plan as required in section 64422;
- (2) Collect routine, repeat and replacement samples as required in Sections 64423, 64424, and 64425;
- (3) Have all samples analyzed by laboratories approved to perform those analyses by the State Board and report results as required in section 64423.1;
- (4) Notify the State Board when there is an increase in coliform bacteria in bacteriological samples as required in section 64426; and
- (5) Comply with the Maximum Contaminant Level as required in section 64426.1.

California Code of Regulations (CCR), Section 64424 states, in relevant part:

(d) If a public water system for which fewer than five routine samples/month are collected has one or more total coliform-positive samples, the water supplier shall collect at least five routine samples the following month. If the supplier stops supplying water during the month after the total coliform-positive(s), at least five samples shall be collected during the first month the system resumes operation. A water supplier may request the State Board waive the requirement to collect at least five routine samples the following month, but a waiver will not be granted solely on the basis that all repeat samples are total coliform-negative. To request a waiver, one of the following conditions shall be met:

- (1) The State Board conducts a site visit before the end of the next month the system provides water to the public to determine whether additional monitoring and/or corrective action is necessary to protect public health.
- (2) The State Board determines why the sample was total coliform-positive and establishes that the system has corrected the problem or will correct the problem before the end of the next month the system serves water to the public. If a waiver is granted, a system shall collect at least one

routine sample before the end of the next month it serves water to the public and use it to determine compliance with §64426.1.

California Code of Regulations (CCR), Section 64426 states, in relevant part:

- (a) Any of the following criteria shall indicate a possible significant rise in bacterial count:
 - (1) A system collecting at least 40 samples per month has a total coliform-positive routine sample followed by two total coliform-positive repeat samples in the repeat sample set;
 - (2) A system has a sample which is positive for fecal coliform or E. coli; or
 - (3) A system fails the total coliform Maximum Contaminant Level (MCL) as defined in §64426.1.
- (b) When the coliform levels specified in subsection (a) are reached or exceeded, the water supplier shall:
 - (1) Contact the State Board by the end of the day on which the system is notified of the test result or the system determines that it has exceeded the MCL, unless the notification or determination occurs after the State Board office is closed, in which case the supplier shall notify the State Board office within 24 hours; and
 - (2) Submit to the State Board information on the current status of physical works and operating procedures which may have caused the elevated bacteriological findings, or any information on community illness suspected of being waterborne. This shall include, but not be limited to:
 - (A) Current operating procedures that are or could potentially be related to the increase in bacterial count;
 - (B) Any interruptions in the treatment process;
 - (C) System pressure loss to less than 5 psi;
 - (D) Vandalism and/or unauthorized access to facilities;
 - (E) Physical evidence indicating bacteriological contamination of facilities;
 - (F) Analytical results of any additional samples collected, including source samples;

- (G) Community illness suspected of being waterborne; and
- (H) Records of the investigation and any action taken.

California Code of Regulations (CCR), Section 64426.1 states, in relevant part:

(b) A public water system is in violation of the total coliform MCL [maximum contaminant level] when any of the following occurs:

- (2) For a public water system which collects fewer than 40 samples per month, more than one sample collected during any month is total coliform-positive; or
- (3) Any repeat sample is fecal coliform-positive or E. coli-positive; or
- (4) Any repeat sample following a fecal coliform-positive or E. coli-positive routine sample is total coliform-positive.

California Code of Regulations Section 64463.4 states, in relevant part:

(a) A water system shall give public notice pursuant to this section if any of the following occurs:

- (1) Any violation of the MCL, MRDL, and treatment technique requirements, except:
 - (A) Where a Tier 1 public notice is required under section 64463.1; or
 - (B) Where the State Board determines that a Tier 1 public notice is required, based on potential health impacts and persistence of the violations
- (2) All violations of the monitoring and testing procedure requirements in sections 64421 through 64426.1, article 3 (Primary Standards – Bacteriological Quality), for which the State Board determines that a Tier 2 rather than a Tier 3 public notice is required, based on potential health impacts and persistence of the violations;
- (3) Other violations of the monitoring and testing procedure requirements in this chapter, and chapters 15.5, 17 and 17.5, for which the State Board determines that a Tier 2 rather than a Tier 3 public notice is required, based on potential health impacts and persistence of the violations; or

(4) Failure to comply with the terms and conditions of any variance or exemption in place.

(b) A water system shall give the notice as soon as possible within 30 days after it learns of a violation or occurrence specified in subsection (a), except that the water system may request an extension of up to 60 days for providing the notice. This extension would be subject to the State Board's written approval based on the violation or occurrence having been resolved and the State Board's determination that public health and welfare would in no way be adversely affected. In addition, the water system shall:

(1) Maintain posted notices in place for as long as the violation or occurrence continues, but in no case less than seven days;

(2) Repeat the notice every three months as long as the violation or occurrence continues. Subject to the State Board's written approval based on its determination that public health would in no way be adversely affected, the water system may be allowed to notice less frequently but in no case less than once per year. No allowance for reduced frequency of notice shall be given in the case of a total coliform MCL violation or violation of a Chapter 17 treatment technique requirement; and

(3) For turbidity violations pursuant to sections 64652.5(c)(2) and 64653(c), (d) and (f), as applicable, a water system shall consult with the State Board as soon as possible within 24 hours after the water system learns of the violation to determine whether a Tier 1 public notice is required. If consultation does not take place within 24 hours, the water system shall give Tier 1 public notice within 48 hours after learning of the violation.

(c) A water system shall deliver the notice, in a manner designed to reach persons served, within the required time period as follows:

(1) Unless otherwise directed by the State Board in writing based on its assessment of the violation or occurrence and the potential for adverse effects on public health and welfare, community water systems shall give public notice by:

(A) Mail or direct delivery to each customer receiving a bill including those that provide their drinking water to others (e.g., schools or school systems, apartment building owners, or large private employers), and other service connections to which water is delivered by the water system; and

(B) Use of one or more of the following methods to reach persons not likely to be reached by a mailing or direct delivery (renters, university students, nursing home patients, prison inmates, etc.):

1. Publication in a local newspaper;
2. Posting in conspicuous public places served by the water system, or on the Internet; or
3. Delivery to community organizations.

(2) Unless otherwise directed by the State Board in writing based on its assessment of the violation or occurrence and the potential for adverse effects on public health and welfare, noncommunity water systems shall give the public notice by:

(A) Posting in conspicuous locations throughout the area served by the water system; and

(B) Using one or more of the following methods to reach persons not likely to be reached by a public posting:

1. Publication in a local newspaper or newsletter distributed to customers;
2. E-mail message to employees or students;
3. Posting on the Internet or intranet; or
4. Direct delivery to each customer.

California Code of Regulations (CCR), Section 64465 states in relevant part:

(a) Each public notice given pursuant to this article shall contain the following:

(1) A description of the violation or occurrence, including the contaminant(s) of concern, and (as applicable) the contaminant level(s);

(2) The date(s) of the violation or occurrence;

(3) Any potential adverse health effects from the violation or occurrence, including the appropriate standard health effects language from appendices 64465-A through G;

(4) The population at risk, including subpopulations particularly vulnerable if exposed to the contaminant in drinking water;

(5) Whether alternative water supplies should be used;

(6) What actions consumers should take, including when they should seek medical help, if known;

(7) What the water system is doing to correct the violation or occurrence;

(8) When the water system expects to return to compliance or resolve the occurrence;

(9) The name, business address, and phone number of the water system owner, operator, or designee of the water system as a source of additional information concerning the public notice;

(10) A statement to encourage the public notice recipient to distribute the public notice to other persons served, using the following standard language: "Please share this information with all the other people who drink this water, especially those who may not have received this public notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this public notice in a public place or distributing copies by hand or mail"; and

(11) For a water system with a monitoring and testing procedure violation, this language shall be included: "We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During [*compliance period dates*], we [*did not monitor or test or did not complete all monitoring or testing*] for [*contaminant(s)*], and therefore, cannot be sure of the quality of your drinking water during that time."

(c) Each public notice given pursuant to this article shall contain information in Spanish regarding the importance of the notice, or contain a telephone number or address where Spanish-speaking residents may contact the water system to obtain a translated copy of the public notice or assistance in Spanish. For each non-English speaking group other than Spanish-speaking that exceeds 1,000 residents or 10% of the residents in the community served, whichever is less, the public notice shall:

- (1) Contain information in the appropriate language(s) regarding the importance of the notice, or
- (2) Contain a telephone number or address where such residents may contact the water system to obtain a translated copy of the notice or assistance in the appropriate language.

(d) Each public notice given pursuant to this article shall:

- (1) Be displayed such that it catches people's attention when printed or posted and be formatted in such a way that the message in the public notice can be understood at the eighth-grade level;
- (2) Not contain technical language beyond an eighth-grade level or print smaller than 12 point; and
- (3) Not contain language that minimizes or contradicts the information being given in the public notice.

REVISED TOTAL COLIFORM RULE (RTCR) – LEVEL 1 ASSESSMENT Groundwater System with Chlorination and Storage

This form is intended to assist public water systems in completing the investigation required by the federal revised Total Coliform Rule (rTCR) [effective April 1, 2016] and may be modified to take into account conditions unique to the water system. **To avoid a violation, an assessment report must be completed and returned to your local regulatory agency no later than 30 days after the trigger date.**



ADMINISTRATIVE INFORMATION

Entity Name:	Name	System Address & Email	Telephone Number
PWSID NUMBER:			
Operator in Responsible Charge (ORC)			
Person that collected TC samples			
System Owner			
Certified Laboratory for Microbiological Analyses			
Date Investigation Completed:			
Month(s) of Coliform Treatment Technique Trigger:			

INVESTIGATION DETAILS

SOURCE	WELL (name)	WELL (name)	WELL (name)	WELL (name)	COMMENTS (attach additional pages if needed)
1. Inspect each well head for physical defects and report					
a. Is raw water sample tap upstream from point of disinfection?					
b. Is wellhead vent pipe screened?					
c. Is wellhead seal watertight?					
d. Is well head located in pit or is any piping from the wellhead submerged?					
e. Does the ground surface slope towards well head?					
f. Is there evidence of standing water near the wellhead?					
g. Are there any connections to the raw water piping that could be cross connections? (describe all connections in comments)					
h. Is the wellhead secured to prevent unauthorized access?					
i. To what treatment plant (name) does this well pump?					
j. How often do you take a raw water total coliform (TC) test?					
k. Provide the date and result of the last TC test at this location					

TREATMENT

	PLANT (NAME)	PLANT (NAME)	PLANT (NAME)	PLANT (NAME)	COMMENTS (attach additional pages if needed)
1. If you provide continuous chlorination, was there any equipment failure?					
a. Did this result in a loss of chlorine residual at the entry point to distribution system? If Yes, how long?					
b. Was emergency chlorination initiated? If Yes, how long?					
c. Did the distribution system lose chlorine residual?					

REVISED TOTAL COLIFORM RULE (RTCR) – LEVEL 1 ASSESSMENT FORM

Groundwater System with Chlorination and Storage

Page 2 of 6

TREATMENT	PLANT	PLANT	PLANT	PLANT	COMMENTS (attach additional pages if needed)
	(NAME)	(NAME)	(NAME)	(NAME)	
2. If you do not provide routine chlorination, was emergency chlorination initiated? If Yes, when?					
3. Inspect each point where disinfectant is added and report					
a. Is the disinfectant feed pump feeding disinfectant?					
b. What is the feed rate of disinfectant in ml/minute?					
c. What is the concentration of the disinfectant solution being fed? (percent or mg/l of chlorine as HOCl)					
d. By what method was the concentration of solution determined? (ex: measured, manufacturer's literature)					
e. What is the age (days) of the disinfectant solution currently being used at this treatment location?					
f. What is the raw water flow rate at the point where disinfectant is added in gallons per minute?					
g. What is the total chlorine residual measured immediately downstream from the point of application?					
h. What is the free chlorine residual measured immediately downstream from the point of application?					
i. What is the contact time in minutes from the point of disinfectant application to the first customer?					

SAMPLE SITE EVALUATION (Complete for all TC+ or EC+ findings)	Routine Site	Upstream	Downstream	4 th Repeat Sample
	TC+ or EC+	Site	Site	(Specify)
1. What is the height of the sample tap above grade? (inches)				
2. Is the sample tap located in an exterior location or is it protected by an enclosure ?				
3. Is the sample tap threaded, have a swing arm (kitchen sink) or an aerator (sinks)?				
4. Is the sample tap in good condition, free of leaks around the stem or packing?				
5. Can the sample tap be adjusted to the point where a good laminar flow can be achieved without excessive splash?				
6. Is the sample tap and areas around the sample tap clean and dry (free of animal droppings other contaminants or spray irrigation systems)?				
7. Is the area around the sample tap free of excessive vegetation or other impediments to sample collection?				
8. Describe how the tap was treated in preparation for sample collection (ran water, swabbed with disinfectant, flamed, etc.).				

REVISED TOTAL COLIFORM RULE (RTCR) – LEVEL 1 ASSESSMENT FORM

Groundwater System with Chlorination and Storage

Page 3 of 6

SAMPLE SITE EVALUATION (Complete for all TC+ or EC+ findings)	Routine Site	Upstream	Downstream	4 th Repeat Sample (specify)
	TC+ or EC+	Site	Site	
9. Is this sample tap designated on the bacteriological sample siting plan (BSSP) as a routine or repeat site?				
10. Were the samples delivered to the laboratory in a cooler and within the allowable holding time?				
11. What were the weather conditions at the time of the positive sample (rainy, windy, and sunny)?				

STORAGE	TANK	TANK	TANK	TANK	COMMENTS
	(name)	(name)	(name)	(name)	
1. Is each tank locked to prevent unauthorized access?					
2. Are all vents of each tank screened down-turned to prevent dust and dirt from entering the tank?					
3. Is the overflow on each tank screened?					
4. Are there any unsealed openings in the tank such as access doors, water level indicators hatches, etc.?					
5. Is the roof/cover of the tank sealed and free of any leaks?					
6. Is the tank above ground or buried?					
a. If buried or partially buried, are there provisions to direct surface water away from the site.					
b. Has the interior of the tank been inspected to identify any sanitary defects, such as root intrusion?					
7. Does the tank "float" on the distribution system or are there separate inlet and outlet lines?					
8. What is the measured chlorine residual (total/free) of the water exiting the storage tank today?					
9. What is the volume of the storage tank in gallons?					
10. Is the tank baffled?					
11 Prior to the TC+ or EC+, what was the previous date item #1-6 were checked and documented?					

PRESSURE TANK	TANK	TANK	TANK	TANK	COMMENTS
	(name)	(name)	(name)	(name)	
1. What is the volume of the pressure tank?					
2. What is the age of the pressure tank?					
3. Is the pressure tank bladder type or air compressor type?					
4. Did the pressure tank(s) deviate from normal operating pressure?					

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PRESSURE TANK	TANK	TANK	TANK	TANK	COMMENTS
	(name)	(name)	(name)	(name)	
5. Is the compressor pump running more often than normal?					
6. Is the tank bladder(s) is water logged?					
7. Is the tank(s) damaged, rusty, leaking, or has holes?					
8. Was there any recent work performed?					
9. Is the air relief vent (if there is one) on the pressure tank screened and facing downwards?					
10. Can the inside of the pressure tank be visually inspected thru an inspection port? If so, when was the last time it was inspected?					

DISTRIBUTION SYSTEM	SYSTEM RESPONSES
1. What is the minimum pressure you are maintaining in the distribution system?	
2. Did pressure in the distribution system drop to less than 5 psi prior to positive back?	
3. Has the distribution system been worked on within the last week? (taps, hydrant flushing, main breaks, mainline extensions, etc.) If yes, provide details.	
4. Are there any signs of excavations near your distribution system not under the direct control of your maintenance staff?	
5. Did you inspect your distribution system to check for mainline leaks? Do you or did you have a mainline leak?	
6. If there was a mainline leak, when was it repaired?	
7. On what date was the distribution system last flushed?	
8. Is there a written flushing procedure you can provide for our review?	
9. Do you have an active cross-connection control program?	
10. What is name & phone number of your Cross-Connection Control Program Coordinator?	
11. Have all backflow prevention devices in the distribution system been tested annually and repaired/replaced if they did not pass and retested afterwards?	
12. When was the last physical survey of the system done to identify cross-connections?	

BOOSTER STATION	Response
1. Do you have a booster pump? How many?	
2. Do you have a standby booster pump if the main pump fails?	
3. Prior to bacteriological quality problems, did your booster pump fail?	
4. Do you notice standing water, leakage at the booster station?	

GENERAL OPERATIONS:	Response
1. Has the sampler(s) who collected the samples received training on proper sampling techniques? If yes, please indicate date of last training.	

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GENERAL OPERATIONS:		Response
2.	Does the water system have a written sampling procedure and was it followed?	
3.	Where there any power outages that affected water system facilities during the 30 days prior to the TC+ or EC + findings?	
4.	Were there any main breaks, water outages, or low pressure reported in the service area from which TC+ or EC+ samples were collected?	
5.	Does the system have backup power or elevated storage?	
6.	During or soon after bacteriological quality problems, did you receive any complaints of any customers' illness suspected of being waterborne? How many?	
7.	What were the symptoms of illness if you received complaints about customers being sick?	

SUMMARY: Based on the results of your assessment and any other available information, what deficiencies do you believe to have caused the positive total coliform sample(s) within your distribution system? (DO NOT LEAVE BLANK)

Deficiency #	Deficiency Description
1.	
2.	
3.	
4.	
5.	

CORRECTIVE ACTIONS: What actions have you taken to correct the above mentioned deficiencies? If additional time is needed to correct a deficiency, indicate the date that it will be corrected. (DO NOT LEAVE BLANK)

Deficiency #	Corrective Action	Completion/Proposed Date
1.		
2.		
3.		
4.		
5.		

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CERTIFICATION: I certify under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

NAME: _____ **TITLE:** _____ **DATE:** _____

Upon review of the Level 1 Assessment Form, the local regulatory agency may require submittal of the following additional information:

- Sketch of system showing all sources, all treatment and chlorination locations, storage tanks, microbiological sampling sites and general layout of the distribution system including the location of all hazardous connections such as the wastewater treatment facility.
- A set of photographs of the source, pressure tanks, and storage tanks in the system may be submitted if they would show that the contamination is directly related and changes have been made since the last inspection by the local regulatory agency.
- Name, certification level and certificate number of the Operator in Responsible Charge.
- Copy of the last cross connection survey performed that identifies the location of all unprotected cross connections.